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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/646,825

DATE: 03/29/2001

TIME: 15:59:57

Input Set : A:\55022715.app

Output Set: N:\CRF3\03292001\I646825.raw

ENTERED

3 <110> APPLICANT: MORI, SATOSHI
 4 NAKANISHI, HIROMI
 5 OKI, HIROYUKI
 6 YAMAGUCHI, HIROTAKA
 8 <120> TITLE OF INVENTION: METHOD FOR TRANSFORMING PLANT, THE RESULTANT PLANT AND
 9 GENE THEREOF
 11 <130> FILE REFERENCE: 55022 (71526)
 13 <140> CURRENT APPLICATION NUMBER: 09/646,825
 14 <141> CURRENT FILING DATE: 2000-09-22
 16 <150> PRIOR APPLICATION NUMBER: JP/10-96637
 17 <151> PRIOR FILING DATE: 1998-03-24
 19 <160> NUMBER OF SEQ ID NOS: 38
 21 <170> SOFTWARE: PatentIn Ver. 2.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 2092
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Artificial Sequence
 28 <220> FEATURE:
 29 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 30 saccharomyces cerevisiae
 32 <220> FEATURE:
 33 <221> NAME/KEY: CDS
 34 <222> LOCATION: (20)..(2077)
 36 <400> SEQUENCE: 1
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 38 Met Val Arg Thr Arg Val Leu Phe Cys Leu Phe
 39 1 5 10
 41 atc tct ttc gtc aca gtc caa tcg agc gct aca ctc atc tcc act 100
 42 Ile Ser Phe Phe Ala Thr Val Gln Ser Ser Ala Thr Leu Ile Ser Thr
 43 15 20 25
 45 tca tgc att tct cag gct gca ctg tac cag ttc gga tgc tca agc aag 148
 46 Ser Cys Ile Ser Gln Ala Ala Leu Tyr Gln Phe Gly Cys Ser Ser Lys
 47 30 35 40
 49 tca aag tct tgc tac tgc aag aac atc aat tgg ctc gga agc gtc act 196
 50 Ser Lys Ser Cys Tyr Cys Lys Asn Ile Asn Trp Leu Gly Ser Val Thr
 51 45 50 55
 53 gca tgc gct tat gag aac tcc aaa tct aac aag act ctg gac tcc gct 244
 54 Ala Cys Ala Tyr Glu Asn Ser Lys Ser Asn Lys Thr Leu Asp Ser Ala
 55 60 65 70 75
 57 ttg atg aaa ctt gcc agc caa tgc tca agt atc aag gtt tac aca ctg 292
 58 Leu Met Lys Leu Ala Ser Gln Cys Ser Ser Ile Lys Val Tyr Thr Leu
 59 80 85 90
 61 gag gac atg aag aac atc tac ctt aat gca agt aac tac ctt cgc gct 340
 62 Glu Asp Met Lys Asn Ile Tyr Leu Asn Ala Ser Asn Tyr Leu Arg Ala
 63 95 100 105
 65 cct gag aaa tcc gat aag aag aca gtt tca caa ccg ttg atg gca 388
 66 Pro Glu Lys Ser Asp Lys Lys Thr Val Val Ser Gln Pro Leu Met Ala

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67	110	115	120	
69	aat gag acg gcc tat cac tac tac tat gag gaa aac tat ggg atc cac			436
70	Asn Glu Thr Ala Tyr His Tyr Tyr Glu Glu Asn Tyr Gly Ile His			
71	125	130	135	
73	ttg aat ttg atg cga tct caa tgg tgc gca tgg ggc ctc gtc ttc ttc			484
74	Leu Asn Leu Met Arg Ser Gln Trp Cys Ala Trp Gly Leu Val Phe Phe			
75	140	145	150	155
77	tgg gtc gca gtc ctt acc gcc gca act atc ttg aac att ctc aaa cgc			532
78	Trp Val Ala Val Leu Thr Ala Ala Thr Ile Leu Asn Ile Leu Lys Arg			
79	160	165	170	
81	gta ttc ggc aag aac att atg gca aat tct gtt aag aag tct ctt atc			580
82	Val Phe Gly Lys Asn Ile Met Ala Asn Ser Val Lys Lys Ser Leu Ile			
83	175	180	185	
85	tac cca agc gtt tac aaa gac tac aac gag aga act ttc tat ctt tgg			628
86	Tyr Pro Ser Val Tyr Lys Asp Tyr Asn Glu Arg Thr Phe Tyr Leu Trp			
87	190	195	200	
89	aaa cgt ttg cca ttc aac ttt aca act cga ggc aaa gga ctc gta gtt			676
90	Lys Arg Leu Pro Phe Asn Phe Thr Thr Arg Gly Lys Gly Leu Val Val			
91	205	210	215	
93	ctt atc ttt gtc att ctg act att ctc tca ctc tct ttc gga cat aac			724
94	Leu Ile Phe Val Ile Leu Thr Ile Leu Ser Leu Ser Phe Gly His Asn			
95	220	225	230	235
97	atc aag ttg cca cat cct tac gat aga cct aga tgg aga aga tca atg			772
98	Ile Lys Leu Pro His Pro Tyr Asp Arg Pro Arg Trp Arg Arg Ser Met			
99	240	245	250	
101	gca ttc gtc tca cgc cgt gct gac ttg gca atc gct ctt ttc ccc			820
102	Ala Phe Val Ser Arg Arg Ala Asp Leu Met Ala Ile Ala Leu Phe Pro			
103	255	260	265	
105	gtg gtg tac ctt ttc ggt atc cgg aac aac ccc ttc atc cca atc acc			868
106	Val Val Tyr Leu Phe Gly Ile Arg Asn Asn Pro Phe Ile Pro Ile Thr			
107	270	275	280	
109	gga ttg agc ttt agt act ttc aac ttt tac cac aaa tgg tca gca tac			916
110	Gly Leu Ser Phe Ser Thr Phe Asn Phe Tyr His Lys Trp Ser Ala Tyr			
111	285	290	295	
113	gtc tgc ttc atg tta gcc gtc gtc cat tca atc gtt atg acc gct tca			964
114	Val Cys Phe Met Leu Ala Val Val His Ser Ile Val Met Thr Ala Ser			
115	300	305	310	315
117	gga gtt aaa cga gga gta ttc cag tct ctt gta agg aaa ttc tac ttc			1012
118	Gly Val Lys Arg Gly Val Phe Gln Ser Leu Val Arg Lys Phe Tyr Phe			
119	320	325	330	
121	aga tgg gga ata gta gcc aca att ctt atg tcc atc atc att ttc cag			1060
122	Arg Trp Gly Ile Val Ala Thr Ile Leu Met Ser Ile Ile Ile Phe Gln			
123	335	340	345	
125	tcc gag aag gtc ttc agg aac cga ggt tat gaa atc ttc tta ctt att			1108
126	Ser Glu Lys Val Phe Arg Asn Arg Gly Tyr Glu Ile Phe Leu Leu Ile			
127	350	355	360	
129	cac aaa gcc atg aac atc atg ttt atc ata gct atg tat tac cat tgc			1156
130	His Lys Ala Met Asn Ile Met Phe Ile Ile Ala Met Tyr Tyr His Cys			
131	365	370	375	

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133 cac aca cta gga tgg atg ggc tgg atc tgg tcc atg gct ggc atc ctc	1204
134 His Thr Leu Gly Trp Met Gly Trp Ile Trp Ser Met Ala Gly Ile Leu	
135 380 385 390 395	
137 tgc ttc gac agg ttc tgc cga att gta cgt atc atc atg aac gga ggt	1252
138 Cys Phe Asp Arg Phe Cys Arg Ile Val Arg Ile Ile Met Asn Gly Gly	
139 400 405 410	
141 ctt aag acc gcc act ttg tcg acc aca gat gat tct aac gtt atc aag	1300
142 Leu Lys Thr Ala Thr Leu Ser Thr Thr Asp Asp Ser Asn Val Ile Lys	
143 415 420 425	
145 atc tct gtc aag aag cct aag ttc ttc aag tat caa gtg gga gca ttt	1348
146 Ile Ser Val Lys Lys Pro Lys Phe Phe Lys Tyr Gln Val Gly Ala Phe	
147 430 435 440	
149 gcc tat atg tac ttt ctt tca cca aaa tca gcc tgg ttc tac agt ttt	1396
150 Ala Tyr Met Tyr Phe Leu Ser Pro Lys Ser Ala Trp Phe Tyr Ser Phe	
151 445 450 455	
153 caa tct cat ccc ttc aca gtc cta tca gaa agg cac aga gat cct aac	1444
154 Gln Ser His Pro Phe Thr Val Leu Ser Glu Arg His Arg Asp Pro Asn	
155 460 465 470 475	
157 aac cca gat caa cta act atg tac gtc aaa gct aac aag ggc att acg	1492
158 Asn Pro Asp Gln Leu Thr Met Tyr Val Ala Asn Lys Gly Ile Thr	
159 480 485 490	
161 aga gta ctt ctt agc aaa gtt cta agc gct cca aac cat acc gtt gat	1540
162 Arg Val Leu Leu Ser Lys Val Leu Ser Ala Pro Asn His Thr Val Asp	
163 495 500 505	
165 tgc aag att ttc tta gag gga cca tat ggc gta act gtc cct cac att	1588
166 Cys Lys Ile Phe Leu Glu Gly Pro Tyr Gly Val Thr Val Pro His Ile	
167 510 515 520	
169 gcc aaa ctt aag aga aat cta gta gga gta gct gcg ggc ctc ggc gtg	1636
170 Ala Lys Leu Lys Arg Asn Leu Val Gly Val Ala Ala Gly Leu Gly Val	
171 525 530 535	
173 gca gcc atc tac ccc cat ttc gta gaa tgc ctt aga ttg cct agc act	1684
174 Ala Ala Ile Tyr Pro His Phe Val Glu Cys Leu Arg Leu Pro Ser Thr	
175 540 545 550 555	
177 gat caa ctg cag cac aag ttc tac tgg atc gtc aac gac ctt agt cac	1732
178 Asp Gln Leu Gln His Lys Phe Tyr Trp Ile Val Asn Asp Leu Ser His	
179 560 565 570	
181 ctt aag tgg ttc gaa aac gag cta caa tgg ctt aag gag aaa tct tgt	1780
182 Leu Lys Trp Phe Glu Asn Glu Leu Gln Trp Leu Lys Glu Lys Ser Cys	
183 575 580 585	
185 gaa gtc tct gtc atc tac act ggg tca tca gtg gag gat aca aac tca	1828
186 Glu Val Ser Val Ile Tyr Thr Gly Ser Ser Val Glu Asp Thr Asn Ser	
187 590 595 600	
189 gat gag tcc act aag ggt ttc gat gac aag gaa gaa tct gaa atc acc	1876
190 Asp Glu Ser Thr Lys Gly Phe Asp Asp Lys Glu Glu Ser Glu Ile Thr	
191 605 610 615	
193 gta gaa tgc ctt aac aag agg cca gac ctc aaa gag cta gtg aga tca	1924
194 Val Glu Cys Leu Asn Lys Arg Pro Asp Leu Lys Glu Leu Val Arg Ser	
195 620 625 630 635	
197 gag atc aaa ttg tca gaa ctc gag aac aac atc act ttc tac tca	1972

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198 Glu Ile Lys Leu Ser Glu Leu Glu Asn Asn Asn Ile Thr Phe Tyr Ser
 199 640 645 650
 201 tgc gga cca gcg act ttc aat gac gac ttt agg aat gca gtt gta caa 2020
 202 Cys Gly Pro Ala Thr Phe Asn Asp Asp Phe Arg Asn Ala Val Val Gln
 203 655 660 665
 205 ggt atc gat tct agt ctg aag ata gat gtc gaa cta gag gag gag agt 2068
 206 Gly Ile Asp Ser Ser Leu Lys Ile Asp Val Glu Leu Glu Glu Ser
 207 670 675 680
 209 ttt act tgg taagagctca agctt 2092
 210 Phe Thr Trp
 211 685
 214 <210> SEQ ID NO: 2
 215 <211> LENGTH: 686
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 220 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 221 saccharomyces cerevisiae
 223 <400> SEQUENCE: 2
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 225 1 5 10 15
 227 Thr Val Gln Ser Ser Ala Thr Leu Ile Ser Thr Ser Cys Ile Ser Gln
 228 20 25 30
 230 Ala Ala Leu Tyr Gln Phe Gly Cys Ser Ser Lys Ser Lys Ser Cys Tyr
 231 35 40 45
 233 Cys Lys Asn Ile Asn Trp Leu Gly Ser Val Thr Ala Cys Ala Tyr Glu
 234 50 55 60
 236 Asn Ser Lys Ser Asn Lys Thr Leu Asp Ser Ala Leu Met Lys Leu Ala
 237 65 70 75 80
 239 Ser Gln Cys Ser Ser Ile Lys Val Tyr Thr Leu Glu Asp Met Lys Asn
 240 85 90 95
 242 Ile Tyr Leu Asn Ala Ser Asn Tyr Leu Arg Ala Pro Glu Lys Ser Asp
 243 100 105 110
 245 Lys Lys Thr Val Val Ser Gln Pro Leu Met Ala Asn Glu Thr Ala Tyr
 246 115 120 125
 248 His Tyr Tyr Tyr Glu Glu Asn Tyr Gly Ile His Leu Asn Leu Met Arg
 249 130 135 140
 251 Ser Gln Trp Cys Ala Trp Gly Leu Val Phe Phe Trp Val Ala Val Leu
 252 145 150 155 160
 254 Thr Ala Ala Thr Ile Leu Asn Ile Leu Lys Arg Val Phe Gly Lys Asn
 255 165 170 175
 257 Ile Met Ala Asn Ser Val Lys Lys Ser Leu Ile Tyr Pro Ser Val Tyr
 258 180 185 190
 260 Lys Asp Tyr Asn Glu Arg Thr Phe Tyr Leu Trp Lys Arg Leu Pro Phe
 261 195 200 205
 263 Asn Phe Thr Thr Arg Gly Lys Gly Leu Val Val Leu Ile Phe Val Ile
 264 210 215 220
 266 Leu Thr Ile Leu Ser Leu Ser Phe Gly His Asn Ile Lys Leu Pro His
 267 225 230 235 240

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269 Pro Tyr Asp Arg Pro Arg Trp Arg Arg Ser Met Ala Phe Val Ser Arg
 270 245 250 255
 272 Arg Ala Asp Leu Met Ala Ile Ala Leu Phe Pro Val Val Tyr Leu Phe
 273 260 265 270
 275 Gly Ile Arg Asn Asn Pro Phe Ile Pro Ile Thr Gly Leu Ser Phe Ser
 276 275 280 285
 278 Thr Phe Asn Phe Tyr His Lys Trp Ser Ala Tyr Val Cys Phe Met Leu
 279 290 295 300
 281 Ala Val Val His Ser Ile Val Met Thr Ala Ser Gly Val Lys Arg Gly
 282 305 310 315 320
 284 Val Phe Gln Ser Leu Val Arg Lys Phe Tyr Phe Arg Trp Gly Ile Val
 285 325 330 335
 287 Ala Thr Ile Leu Met Ser Ile Ile Phe Gln Ser Glu Lys Val Phe
 288 340 345 350
 290 Arg Asn Arg Gly Tyr Glu Ile Phe Leu Leu Ile His Lys Ala Met Asn
 291 355 360 365
 293 Ile Met Phe Ile Ile Ala Met Tyr Tyr His Cys His Thr Leu Gly Trp
 294 370 375 380
 296 Met Gly Trp Ile Trp Ser Met Ala Gly Ile Leu Cys Phe Asp Arg Phe
 297 385 390 395 400
 299 Cys Arg Ile Val Arg Ile Ile Met Asn Gly Gly Leu Lys Thr Ala Thr
 300 405 410 415
 302 Leu Ser Thr Thr Asp Asp Ser Asn Val Ile Lys Ile Ser Val Lys Lys
 303 420 425 430
 305 Pro Lys Phe Phe Lys Tyr Gln Val Gly Ala Phe Ala Tyr Met Tyr Phe
 306 435 440 445
 308 Leu Ser Pro Lys Ser Ala Trp Phe Tyr Ser Phe Gln Ser His Pro Phe
 309 450 455 460
 311 Thr Val Leu Ser Glu Arg His Arg Asp Pro Asn Asn Pro Asp Gln Leu
 312 465 470 475 480
 314 Thr Met Tyr Val Lys Ala Asn Lys Gly Ile Thr Arg Val Leu Leu Ser
 315 485 490 495
 317 Lys Val Leu Ser Ala Pro Asn His Thr Val Asp Cys Lys Ile Phe Leu
 318 500 505 510
 320 Glu Gly Pro Tyr Gly Val Thr Val Pro His Ile Ala Lys Leu Lys Arg
 321 515 520 525
 323 Asn Leu Val Gly Val Ala Ala Gly Leu Gly Val Ala Ala Ile Tyr Pro
 324 530 535 540
 326 His Phe Val Glu Cys Leu Arg Leu Pro Ser Thr Asp Gln Leu Gln His
 327 545 550 555 560
 329 Lys Phe Tyr Trp Ile Val Asn Asp Leu Ser His Leu Lys Trp Phe Glu
 330 565 570 575
 332 Asn Glu Leu Gln Trp Leu Lys Glu Lys Ser Cys Glu Val Ser Val Ile
 333 580 585 590
 335 Tyr Thr Gly Ser Ser Val Glu Asp Thr Asn Ser Asp Glu Ser Thr Lys
 336 595 600 605
 338 Gly Phe Asp Asp Lys Glu Glu Ser Glu Ile Thr Val Glu Cys Leu Asn
 339 610 615 620
 341 Lys Arg Pro Asp Leu Lys Glu Leu Val Arg Ser Glu Ile Lys Leu Ser

VERIFICATION SUMMARY
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